

Case Docket No. IKU 0102 PUSA**AMENDMENT TRANSMITTAL**

In re application of: KENJI SAKAMOTO	Serial No.: 09/269,703
	Filed: February 2, 2000
Title: METHOD FOR THE IDENTIFICATION OF PHYSIOLOGICALLY ACTIVE PEPTIDES AND PROCESS FOR PRODUCING SAME (AS AMENDED)	

To: Commissioner for Patents
United States Patent and Trademark Office
Washington, D.C. 20231

Sir:

Transmitted herewith is an amendment in the above-identified application.

☒ Applicant has previously claimed small entity status.

The filing fee has been calculated as shown below:

	(Col. 1)		(Col. 2)	(Col. 3)	Small Entity		Other Than Small Entity	
	Claims Remaining After		Highest No. Previously Paid For	Present Extra	Rate	Additional Fee	Rate	Additional Fee
Total	* 9	minus	** 20	0	x 9 =	\$ 0	x 18 =	\$
Indep.	* 5	minus	*** 3	2	x 40 =	\$80.00	x 80 =	\$
First Presentation Of Multiple Dependent Claim					x 135 =	\$	x 270 =	\$
					Total Addit. Fee	\$80.00	Or Total	\$

* If the entry in Col. 1 is less than the entry in Col. 2, write "0" in Col. 3.
** If "Highest No. Previously Paid For" is less than 20, write "20" in this space.
*** If "Highest No. Previously Paid For" is less than 3, write "3" in this space.

☒ A Petition fee under 37 C.F.R. § 1.17 has been calculated in the amount of \$ 695.00 to cover a four-month small entity extension of time under 37 C.F.R. § 1.136(a).

Payment of fee(s) calculated above:

☐ No additional fee is required.☒ A check in the amount of \$ 775.00 to cover the additional filing fee and/or Petition fee is enclosed.☐ Please charge my Deposit Account No. 02-3978 in the amount of \$ _____. A duplicate copy of this sheet is enclosed.

☒ The Commissioner is hereby authorized to charge payment of the following fees associated with this communication or credit any overpayment to Deposit Account No. 02-3978. A duplicate copy of this sheet is enclosed.

☒ Any additional filing fees required under 37 C.F.R. § 1.16 for the presentation of extra claims.

☒ Any patent application processing fees under 37 C.F.R. § 1.17.

CERTIFICATE OF MAIL UNDER 37 C.F.R. § 1.10 I hereby certify that this correspondence, including all enclosures, is being deposited with the United States Postal Service as first class mail, postage pre-paid, in an envelope addressed to: Commissioner for Patents, United States Patent and Trademark Office, Washington, D.C. 20231. January 16, 2001 Date of Deposit Signature <u>James N. Kallis</u> Name of Person Signing	Respectfully submitted, <u>James N. Kallis</u> James N. Kallis Registration No. 41,102 BROOKS & KUSHMAN P.C. 1000 Town Center, 22nd Floor Southfield, Michigan 48075 -- (248) 358-4400
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RECEIVED
JAN 31 2001Practitioner's Docket No. IKU 0102 PUSA

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Kenji Sakamoto

Application No.: 09 / 269,703 Group No.: 1646

Filed: February 2, 2000 Examiner: John Ulm

For: METHOD OF SEARCHING FOR PHYSIOLOGICALLY ACTIVE
SUBSTANCES AND PROCESS FOR PRODUCING THE SAME

Box Sequence

Assistant Commissioner for Patents

Washington, D.C. 20231

**SUBMISSION OF "SEQUENCE LISTING," COMPUTER READABLE COPY,
AND/OR AMENDMENT PERTAINING THERETO
FOR BIOTECHNOLOGY INVENTION CONTAINING NUCLEOTIDE
AND/OR AMINO ACID SEQUENCE**

(check and complete this item, if applicable)

- 1.
- ☒
- This replies to the Office Letter dated
- August 16, 2000

NOTE: If these papers are filed before the office letter issues, adequate identification of the original papers should be made, e.g., in addition to the name of the inventor and title of invention, the filing date based on the "Express Mail" procedure, the application number from the return post card or the attorney's docket number added.

- ☐
- A copy of the Office Letter is enclosed.

CERTIFICATION UNDER 37 C.F.R. §§ 1.8(a) and 1.10*

(When using Express Mail, the Express Mail label number is mandatory;
Express Mail certification is optional.)

I hereby certify that, on the date shown below, this correspondence is being:

MAILING

- ☐
- deposited with the United States Postal Service in an envelope addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231

37 C.F.R. § 1.8(a)**37 C.F.R. § 1.10***

- ☐
- with sufficient postage as first class mail.

- ☐
- as "Express Mail Post Office to Addressee"

Mailing Label No. _____ (mandatory)

TRANSMISSION

- ☐
- transmitted by facsimile to the Patent and Trademark Office.

Mary Germano
Signature

Date: 1/16/01Mary Germano

(type or print name of person certifying)

*WARNING: Each paper or fee filed by Express Mail must have the number of the "Express Mail" mailing label placed thereon prior to mailing. 37 C.F.R. § 1.10(b).

"Since the filing of correspondence under § 1.10 without the Express Mail mailing label thereon is an oversight that can be avoided by the exercise of reasonable care, requests for waiver of this requirement will not be granted on petition." Notice of Oct. 24, 1996, 60 Fed. Reg. 56,439, at 56,442.

(Submission—Nucleotide and/or Amino Acid Sequence [9-37]—page 1 of 6)

01/23/2001 MYUSUF1 00000033 09269703 80.00 0P
02 FC:202

IDENTIFICATION OF PERSON MAKING STATEMENT

2. I, James N. Kallis
(type or print name of declarant signing below)
state the following:

ITEMS BEING SUBMITTED

3. Submitted herewith is/are:
(check each item as applicable)
- A. ☒ "Sequence Listing(s)" for the nucleotide and/or amino acid sequence(s) in this application. Each "Sequence Listing" is assigned a separate identifier as required in 37 C.F.R. § 1.821(c) and 37 C.F.R. §§ 1.822 and 1.823.
 - B. ☒ An amendment to the description and/or claims, wherein reference is made to the sequence by use of the assigned identifier, as required in 37 C.F.R. § 1.821(d).
 - C. ☒ A copy of each "Sequence Listing" submitted for this application in computer readable form, in accordance with the requirements of 37 C.F.R. §§ 1.821(e) and 1.824.
 - D. ☐ Please transfer to this application, in accordance with 37 C.F.R. § 1.821(e), the computer readable copy(ies) from applicant's other application identified as follows:
In re application of:
Application No.: 0 / Group No.:
Filed: Examiner:
For:

The Computer readable form(s) of applicant's other application corresponds to the "Sequence Identifier(s)" of the application as follows:

Computer Readable Form
(other application)

"Sequence Identifier"
(this application)

(Submission—Nucleotide and/or Amino Acid Sequence [9-37]—page 2 of 6)

NOTE: "If the computer readable form of a new application is to be identical with the computer readable form of another application of the applicant on file in the Office, reference may be made to the other application and computer readable form in lieu of filing a duplicate computer readable form in the new application. The new application shall be accompanied by a letter making such reference to the other application and computer readable form, both of which shall be completely identified." 37 C.F.R. § 1.821(e).

- E. ☒ A statement that the content of each "Sequence Listing" submitted and each computer readable copy are the same, as required in 37 C.F.R. § 1.821(g).
- ☐ Because the statement is not made by a person registered to practice before the Office, the statement is verified as required in 37 C.F.R. § 1.821(b).
- F. ☒ Because this submission is made in fulfilling the requirement under 37 C.F.R. § 1.821(g), a statement that the submission includes no new matter.
- ☐ Because the statement is not made by a person registered to practice before the Office, the statement is verified, as required in 37 C.F.R. § 1.821(g).

**STATEMENT THAT "SEQUENCE LISTING"
AND COMPUTER READABLE COPY ARE THE SAME
AND/OR THAT PAPERS SUBMITTED INCLUDES NO NEW MATTER**

4. I hereby state:

(complete applicable item A and/or B)

- A. ☒ Each computer readable form submitted in this application, including those forms requested to be transferred from applicant's other application, is the same as the "Sequence Listing" to which it is indicated to relate.
- B. ☒ All papers accompanying this submission, or for which a request for transfer from applicants' other application, introduce no new matter.

STATUS

5. Applicant is

- ☒ a small entity. A statement:
- ☐ is attached.
- ☒ was already filed.
- ☐ other than a small entity.

EXTENSION OF TERM

6.

NOTE: "Extension of Time in Patent Cases (Supplement Amendments)—If a timely and complete response has been filed after a Non-Final Office Action, an extension of time is not required to permit filing and/or entry of an additional amendment after expiration of the shortened statutory period.

If a timely response has been filed after a Final Office Action, an extension of time is required to permit filing and/or entry of a Notice of Appeal or filing and/or entry of an additional amendment after expiration of the shortened statutory period unless the timely-filed response placed the application in condition for allowance. Of course, if a Notice of Appeal has been filed within the shortened statutory period, the period has ceased to run." Notice of Dec. 10, 1985 (1061 O.G. 34-35).

NOTE: See 37 C.F.R. § 1.645 for extensions of time in interference proceedings and 37 C.F.R. § 1.550(c) for extensions of time in reexamination proceedings.

7. The proceedings herein are for a patent application and the provisions of 37 C.F.R. § 1.136 apply.

(complete (a) or (b) as applicable)

(a) ☒ Applicant petitions for an extension of time under 37 C.F.R. § 1.136 (fees: 37 C.F.R. § 1.17(a)(1)-(4)) for the total number of months checked below:

Extension (months)	Fee for other than small entity	Fee for small entity
<input type="checkbox"/> one month	\$ 110.00	\$ 55.00
<input type="checkbox"/> two months	\$ 390.00	\$ 195.00
<input type="checkbox"/> three months	\$ 890.00	\$ 445.00
<input checked="" type="checkbox"/> four months	\$ 1,390.00	\$ 695.00

Fee: \$ 695.00

If an additional extension of time is required, please consider this a petition therefor.

(check and complete the next item, if applicable)

☐ An extension for _____ months has already been secured. The fee paid therefor of \$_____ is deducted from the total fee due for the total months of extension now requested.

Extension fee due with this request \$_____

OR

(b) ☐ Applicant believes that no extension of term is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition for extension of time.

(Submission—Nucleotide and/or Amino Acid Sequence [9-37]—page 4 of 6)

FEE PAYMENT

8. ☒ Attached is a ☒ check ☐ money order in the amount of \$ 775.00
☐ Authorization is hereby made to charge the amount of \$ _____
☐ to Deposit Account No. _____
☐ to Credit card as shown on the attached credit card information authorization form PTO-2038.

WARNING: Credit card information should **not** be included on this form as it may become public.

- ☐ Charge any additional fees required by this paper or credit any overpayment in the manner authorized above.

A duplicate of this paper is attached.

FEE DEFICIENCY

9.

NOTE: If there is a fee deficiency and there is no authorization to charge an account, additional fees are necessary to cover the additional time consumed in making up the original deficiency. If the maximum, six-month period has expired before the deficiency is noted and corrected, the application is held abandoned. In those instances where authorization to charge is included, processing delays are encountered in returning the papers to the PTO Finance Branch in order to apply these charges prior to action on the cases. Authorization to charge the deposit account for any fee deficiency should be checked. See the Notice of April 7, 1986, 1065 O.G. 31-33.

10. ☒ If any additional extension and/or fee is required, charge
☒ Deposit Account No. 02-3978
☐ Credit card as shown on the attached credit card information authorization form PTO-2038.

WARNING: Credit card information should **not** be included on this form as it may become public.

SIGNATURE(s)

James N. Kallis

(type or print name of person signing statement)

1/16/01

Date

1000 Town Center, 22nd Floor

P.O. Address of Signatory

So Southfield, MI 48075

[Signature]
Signature

(if applicable)

Telephone No. (248) 358-4400

Reg. No. 41,102

Customer No.:

- ☐ Inventor(s)
☐ Assignee of complete interest
☐ Person authorized to sign on behalf of assignee
☒ Practitioner of record
☐ Filed under Rule 34(a)
☐ Registration No. _____
☐ Other _____

(specify identity of declarant)

(complete the following, if applicable)

(type name of assignee)

Address of assignee

Title of person authorized to sign on behalf of
assignee

A "STATEMENT UNDER 37 C.F.R. § 3.73(b)" is attached.

Assignment recorded in PTO on _____

Reel _____ Frame _____

Reg. No.: 41,102

Tel. No.: (248) 358-4400

Customer No.:



SIGNATURE OF PRACTITIONER

James N. Kallis

(type or print name of practitioner)

1000 Town Center, 22nd Floor

P.O. Address

Southfield, MI 48075

(Submission—Nucleotide and/or Amino Acid Sequence [9-37]—page 6 of 6)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

KENJI SAKAMOTO

Serial No.: 09/269,703

Filed: February 2, 2000

For: METHOD OF SEARCHING FOR PHYSIOLOGICALLY
ACTIVE SUBSTANCES AND PROCESS FOR PRODUCING
THE SAME

Group Art Unit: 1646

Examiner: John U. Kim



TECH CENTER 1607 1900

JAN 31 2001

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Attorney Docket No.: IKU 0102 PUSA

**STATEMENT THAT SUBSTITUTE SPECIFICATION
CONTAINS NO NEW MATTER (37 C.F.R. § 1.125)**

Commissioner for Patents
United States Patent and Trademark Office
Washington, D.C. 20231

Sir:

1. Identification of person making this statement

James N. Kallis
BROOKS & KUSHMAN P.C.
Twenty-Second Floor
1000 Town Center
Southfield, Michigan 48075

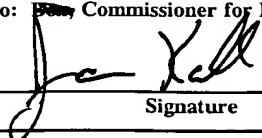
The person making this statement is the attorney in this application, Registration
No. 41,102.

CERTIFICATE OF MAILING UNDER 37 C.F.R. § 1.8

I hereby certify that this paper, including all enclosures referred to herein, is being deposited with the United States Postal Service as first-class mail, postage pre-paid, in an envelope addressed to: ~~Patent~~ Commissioner for Patents, United States Patent and Trademark Office, Washington, D.C. 20231 on:

January 16, 2001
Date of Deposit

James N. Kallis
Name of Person Signing


Signature

**VERSION WITH MARKINGS TO SHOW CHANGES MADE****Claims**

1. (Twice Amended) A method for [searching for] the identification of physiologically active [substances] peptides, the method comprising the steps of:

identifying amino acid sequences of receptors having one or more variants in size, the receptors being receptive of an identical ligand and being products of [a some] the same gene, wherein there is [in human body] a substance or cell present in vivo having a functional antagonism against the ligand for the receptor or against a cell which expresses the receptor of the ligand; and

identifying which domain in the larger receptor [having a longer size] is missing [in] from the smaller receptor [having a shorter size].

Abstract

A method for searching, with predetermined predictability and [more] greater ease, for new physiologically active [substances according to the present invention] peptides is disclosed. In one method [for searching for physiologically active substance according to the] of the present invention, amino acid sequences of receptors having [two] one or more [sizes] variants in size [for identical receptors] are identified, the receptors being receptive of an identical ligand and being products of the same gene, wherein there is a substance or cell present in vivo having a functional antagonism [is a receptor of a substance present in human body, or wherein a cell or substance having a functional antagonism to cells on which a certain substance causes some effects is a receptor of the substance present in human body, and it is identified which domain in the receptor having a longer size is missing in the receptor having a shorter size.] against the ligand for the receptor or against a cell which expresses the receptor of the ligand. The domain in the larger receptor that is missing from the smaller receptor is then identified as having physiological activity. The present invention also provides a method for producing the physiologically active peptides identified by the method described above.

2. I hereby state that the accompanying substitute specification contains no new matter over that contained in the above-identified application originally filed.

Respectfully submitted,

KENJI SAKAMOTO

By


James N. Kallis

Reg. No. 41,102

Attorney/Agent for Applicant

Date: January 16, 2001

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